In re: Lanahan et al. Serial No. 09/909,464 Filed: July 19, 2001

Page 2 of 12

herend

galactosidase is added prior to any steam treatment that the components of animal feed may undergo during processing. --

In the Claims.

Please cancel Claims 2 and 3 for the purposes of rewriting. Please cancel Claims 44-50, 52 and 57 without prejudice to the filing of a continuation application therefor.

Please substitute the following rewritten claims for the pending claims of like number.

1. (Amended) A method of hydrolyzing a galactose-containing oligosaccharide present in a substrate intended for use as an animal feed or human food, comprising:

contacting the substrate with a hyperthermophilic α -galactosidase isolated from the group consisting of *Thermotoga maritima, Thermotoga elfii*, and *Thermotoga* sp. T2; and

heating the substrate to a temperature at which the hyperthermophilic α -galactosidase is active, for a period of time sufficient to hydrolyze the oligosaccharide.

51. (Amended) A method of preventing gastrointestinal distress in a mammal, wherein the gastrointestinal distress is caused by a feed or food containing at least one oligosaccharide selected from the group consisting of raffinose, stachyose and verbascose, comprising:

contacting the feed or food with a hyperthermophilic α -galactosidase isolated from the group consisting of *Thermotoga maritima*, *Thermotoga elfii*, and *Thermotoga* sp. T2; and then

In re: Lanahan et al. Serial No. 09/909,464 Filed: July 19, 2001

Page 3 of 12

K3 grd

heating the feed or food for a period of time sufficient to allow the hyperthermophilic α -galactosidase to hydrolyze the oligosaccharide.

Please add the following new claim.

58. (New) A method of hydrolyzing a galactose-containing oligosaccharide present in a solid substrate intended for use as an animal feed, comprising:

contacting the substrate with a hyperthermophilic α -galactosidase isolated from *Thermotoga maritima*; and

steam heating the substrate to a temperature at which the hyperthermophilic α -galactosidase is active, for a period of time sufficient to hydrolyze the oligosaccharide.